# better than a layup

Challenging Basketball's Conventional Wisdom



# Keep It Binary, Stupid

Basketball's Fourth Law

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#### Author's Note

This is the fourth in a series of ten essays detailing basketball's fundamental laws or principles. In *The Basket is True North*, the third game's third law, I explored how players develop court sense on the defensive end of the floor. In this piece, I turn to offense to uncover how players learn to read the defense and seize the initiative quickly.

-- Mark S. Seeberg February 23, 2020

### **Introduction**

"A key basketball skill is imagery," said the late Dr. Jack Ramsay, the esteemed Hall of Famer who led the 1977 Portland Trailblazers to the NBA championship. "The best players see situations *before* they happen."

What Ramsay was talking about is a concept psychologists call "the gestalt" – grasping the emerging pattern or shape or "whole" of something by seeing just some of its parts. What basketball coaches call "court sense."

As we've learned in our exploration of basketball's first three laws, players develop court sense over time through the lived experience of playing the game. They learn to *see the game*... to "see situations before they happen."

On an elemental level, they begin to experience the physical dimensions of the court and the basic movements of the players in relation to the ball, the basket, and one another. On a deeper level, they become aware of how one's ever-shifting position on the floor shapes reaction time, either shrinking or stretching it, and in turn, compressing or expanding the space in which they must maneuver.

With maturity they begin putting the pieces together, more quickly and intuitively interpreting the evershifting spatial relationships and re-positioning themselves to gain an advantage or mask a weakness.

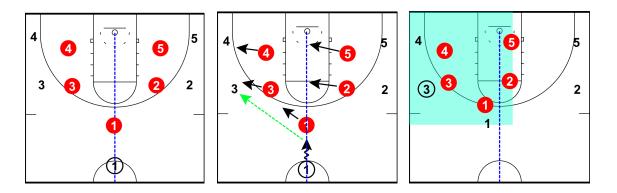
#### Court sense generally emerges at the defensive end first.

For one, it's pretty straight forward. Stripped to its basics, defense is played with the feet and the heart. *You play between your man and the basket.* If a kid is a decent athlete with fair quickness and a desire to compete he can acquire, if not master, defensive fundamentals in relative short order.

Secondly, anticipating or *seeing situations before they happen* is easier because defensive positioning tactics are largely dictated by the physical dimensions of the floor and relationship of the ball to the basket... regardless of the specific offense being employed or the complexity of the actions that comprise it or, for that matter, the strengths of the players executing it.

As we learned in basketball's *Third Law: The basket is True North*, most offensive maneuvers involve only a few players. Even in a regimented "pattern" offense requiring the coordinated movement of all five players, the final assault on the basket usually involves one, two, or at most, three men because any more than that creates congestion. From a defensive perspective, it doesn't make sense to tightly guard offensive players not directly involved in the actual thrust on the basket. That frees their defenders to sag or slide toward the ball side, creating a 5 on 2 or 5 on 3 numbers advantage. Whether the defense is zone, man, or some combination of the two, when the ball moves to one side of the floor, the defenders move with it.

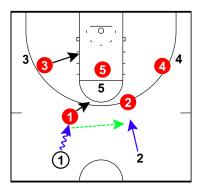
In the sequence of illustrations below, note the blue "rim line" that differentiates the defensive "ball side" from the "help side." In effect, the moving ball "tugs" the defenders in the same direction, the help side defenders stepping toward the invisible rim line while their teammates on the ball side move into positions to pressure the ball and contest attackers "one pass away."



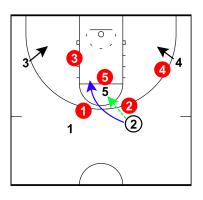
Not only does this create a numbers advantage for the defense, once the position of the ball is established, the range of potential offensive maneuvers narrows because the operating space afforded the offense has shrunk. This makes it easier for the defense to read the attack, anticipating how it might unfold. With experience and good coaching, defenders learn to "see" the unfolding situation and "get out ahead of it."

Consider the following scenario.

The ball is advanced into the front court, the ball handling guard passing across the face of the defense to his teammate. On the pass, the defenders step in the direction of the ball creating an immediate numbers advantage.

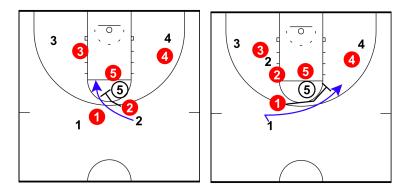


A second pass occurs, this time a bounce pass to the high post, immediately followed by the passer making a scissors cut over the top.

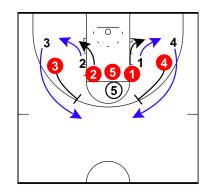


In the millisecond the ball is in flight, the two defensive guards are already on the move because with a fair amount of certainty they can *see the end result* of the maneuver before it occurs. They *know* that the first scissors cut will likely trigger a second, and they use this insight to check both cuts.

On the bounce pass to the high post, defender #2 immediately drops to the depth of the ball in anticipation of the passer's scissors cut, forcing him away from the high post and blocking any handoff. Simultaneously, defender #1 does the same thing. He beats his cutter to the spot above the high post, forcing him wide and away from the offensive center.



And on the backside, defenders #3 and 4 are on the move as well. Intuitively, they know the offensive forwards are likely to rebalance the floor by replacing the cutting guards on the top of the formation. As the guards complete their scissors action, their movement "pushes" the forwards out and up... but the defenders beat them to the spot in an effort to deny any return pass from the high post.

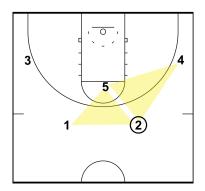


Of course, it doesn't have to unfold that way. Any of the attackers can suddenly change direction, altering the offensive maneuver, but the range of *"reasonable"* or *"likely"* options is limited by the position of the ball and alignment of offensive players in relationship to the basket.

On the whole, then, defenders develop court sense by learning to recognize or see the *shape* of the unfolding maneuver. Even when all the pieces are not immediately apparent, the basic movement or range of possible actions within the shape is limited and known to experienced defenders. They position themselves within the shape so that they can anticipate and respond to any of the likely actions.

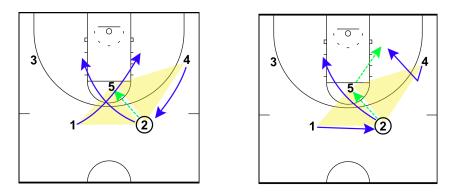
In the illustrations above, before the guard to high post pass takes place followed by the first scissors cut, the defense is confronted with spatial relationships that look something like this.

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#1, 5 and 4 are equally positioned to receive a pass from #2 so the defenders must position themselves to contest each possibility. But once he passes the ball to the high post and begins his scissors cut, the spatial relationships change. At that point, there are only so many things that #1 and 4 can do.

For instance, #1 can follow 2 with his own scissors cut, "pushing" 4 out front to balance the floor as shown in our original illustration, or he can replace 2 as #4 feints outside, then cut sharply back door looking for a pass from 5.



To be sure, there are other possibilities as well but given the position of the ball and alignment of offensive players in relationship to the basket, they're limited in number and from a defensive perspective, *known* or *predictable*. To paraphrase Jack Ramsey's words, the defenders can "see the situation before it happens."

At the offensive end, developing court sense is a longer and more challenging process.

On defense you learn to *read the ball*, identifying the spatial relationships between it, the basket, and the offensive players, and moving to predetermined spots in anticipation of the likely offensive maneuver. But on offense, you must learn to *read the man* – the defender guarding you – determining how best to get open to receive a pass or attempt a shot, or free a teammate to do the same.

The learning process required to make such reads is complicated in two ways.

First, it makes little difference if you can read the defense but lack the necessary fundamentals to respond correctly and quickly to what you have seen. Passing and catching, cutting and screening, dribbling and shooting, pivoting, feinting, changing direction... and each of these skills generating dozens of variations, each

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one an appropriate response to a particular situation or read, but inappropriate for another. Chest pass, baseball pass, bounce pass, or flair pass? Do I curl or fade, roll or slip, catch and shoot, drive or pull-up?

Offensive fundamentals are far greater in number and mechanically more complex than the footwork and positioning tactics required to play good defense. They take a long time to master.

Secondly, reading the defense and making the right choice depends not only on your ability to quickly execute the required fundamentals in response to what you have seen, *but making a choice that fits your coach's offensive system.* Is his offense highly structured and deliberate, requiring a succession of cuts, screens, and passes before a shot attempt? Or does he favor a more flexible, open-ended approach in which he encourages his players to freelance? How does he define a "quality" shot? Does he prefer a game of fast tempo or milking the shot clock to limit the number of offensive possessions?

Absorbing the discrete elements that comprise the coach's offense, coupled with the need to master dozens of offensive fundamental at the same time is daunting, and for many players impedes or hampers their ability to *play the game*. Instead of learning to read the defense and make choices quickly, they get hung up on the mechanics. They tend to overthink what they see and lose the initiative that characterizes good offense.

#### Less is More

Rick Torbett, a seasoned coach with a passion to teach the game, learned this lesson the hard way.

Midway through his career he became frustrated with the annual routine of teaching motion, set plays, and various forms of continuity only to see them breakdown in the face of a live game. "My players became very good at running plays," he says, "but they never learned *bow* to play... If I could change everything and start from nothing, I would teach players how to play *by principle*."

He recounts how he searched for a way to teach the underlying principles of offense in a systematic, "layer by layer" manner that could be used by any age group but in ways that would accommodate their differing levels of maturity. After five years "in the lab," as he describes it, he hit upon an offensive system he calls the "Read and React" and markets today at his website, *betterbasketball.com*.

Torbett believes that "players *should* know when they're being over-played without the ball and can go backdoor. Players *should* know when their defender is out of position and can be beaten by forgetting 'the play' and ripping the ball to the goal. Players *should* see slight openings in the defense that a coach on the sidelines can't and take advantage of them."

And he insists that players can learn these instant reactions if only their coaches get out of the way and stop trying to control everything that takes place on the floor.

Torbett's epiphany reaffirms what basketball aficionados have always known: that basketball is not a game of mechanical exactitude but one of spontaneity and freelance; that the best way to teach players offensive court sense – *to see situations before they happen* – is to strip offensive theory and practice down to simple reads and reactions, letting the mechanical fundamentals develop over time as they play the game.

Dedicated coaches want to "teach" and to do so they often take what is naturally seamless and whole, and break it into parts or pieces that they can describe, drill, and perfect. Taken to extreme this form of instruction actually retards player development. Imagine teaching dancing or music without ever letting the students actually dance or play their instruments, however imperfectly. Form dribbling in and around cones or stationary chairs is one thing but a "live" full-court 3-on-2 drill featuring continuous action, the players transitioning back and forth from offense to defense to offense, not only requires them to space, dribble, pass, shoot, and defend, but to make decisions on the fly. In effect, the game begins to teach itself as the team "plays through" its mistakes.

Coaching in this manner requires patience and tolerance of imperfection, but pays dividends later. *"The kid knew he was being overplayed and went backdoor, but his footwork got in the way. We'll have to work on that."* The focus is on "making the correct read" as the game produces its own penalties and gives instant feedback. This creates a context for learning the fundamentals. Teach the read first, then the fundamentals to execute the choice.

# The Binary Principle

Basketball unfolds as a series of choices, one leading to the next. No matter how controlled or patterned a team attempts to be, the offensive scheme will inevitably break down requiring the attackers to improvise.

Effective coaching exploits this reality by placing players in spots where their natural freelance abilities come to the fore and where the choices are *binary* - "either/or" situations where it is relatively easy for the offense to read the defense and act quickly.

Complicated offensive schemes that congest the floor, obscure the choices, and attempt to control too many variables reward the defense by creating uncertainty and indecisiveness. Too many moving parts complicate the reads, granting the defense time to react.

Conversely, offenses that create quick, binary decision-making are built around actions and maneuvers that shorten defensive reaction time. It may seem counter-intuitive, but an effective offense reduces the number of choices by forcing defenders into "no-win" situations where a choice to respond in one way renders them vulnerable in another way. This makes it easier for offensive players to see or read the defense and seize the initiative quickly.

Take shooting, for instance.

Imagine that you've broken free of your defender and have caught a pass from a teammate within reasonable shooting range of the basket. In other words, at a distance where your shooting ability must be respected.

What's your next move?

In their basketball classic, *Basketball According to Knight and Newell*, Bobby Knight and Pete Newell, two of the greatest coaches of all-time, answer the question: *"We want any player receiving the ball at any position on the court to immediately face the basket for a two-count."* 

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Catch the ball, face the basket, and wait two seconds before acting. The old tried-and-true "triple threat" position coaches have been advocating since the game was invented. Here's the breakdown:

- After you receive the pass, bring the ball down to your hip and face your defender.
- Stand with your feet shoulder-width apart, knees bent, and in a slight crouch.
- Grasp the ball with your weak hand on the side of the ball and your strong hand on top.
- Bend both elbows so they are approximately at right angles.

• Once you're in this position you will have three options: (a) pass the ball to a teammate; (b) dribble past the defender and attack the basket; (c) shoot the jumper. Your decision will be influenced by how the defender is playing you.

A wonderfully exacting description that looks good on paper but has little to do with how the game is actually played.

Listen to Joe Scott, a former player and coaching disciple of Princeton's legendary Pete Carril: "We don't teach the triple-threat position at Princeton... In my entire time as a player I don't remember a single time in a game where I caught a pass, came to a stop so I could crouch and place the ball in a triple-threat position...

#### Think about it.

If you've caught the ball within shooting range we can assume that you worked hard to get free, creating "separation" through your own guile, quickness and hard work, perhaps aided through the efforts of your screening teammates. What's the point of creating separation only to give it back by assuming the classic, crouched-over triple threat position? Any advantage you gained is now lost. The defender is back in your face and your options have been reduced from three to two.

Scott explains further.

When you catch the ball, you've got to be able to pass or shoot or dribble **immediately**. If you catch the ball and assume a triple-threat position – crouched and hunched over – you have to come out this stance – you have to stand up – to pass or shoot or attack the basket. And then it's too late.

The man who passed you the ball and cut to the basket is no longer open; your defender has already closed on you so the shot you would have taken is no longer there; the gap in the defense that you could have driven through has closed.

Instead, it's your ability to meld three different actions into one seamless action that makes you hard to guard. Players that do these things "separately" are easy to guard. Good basketball players can dribble, pass, and shoot all at once."

So how does a basketball player achieve "triple threat" without assuming the classic triple-threat position?

Interestingly, coaches Knight and Newell provide the answer when they discuss how best to attack zone defenses.

"We want our players receiving the ball from a reverse pass to go immediately into the shot motion. If the shot is there without excessive pressure, we want it taken. However, if the defensive man is rushing at the shooter, we want to momentarily straighten him with a good shot fake that involves the ball, the head, and the shoulders, and then get past him with a dribble penetration that will force the defense into a different kind of coverage enabling us to free someone else in the zone."

In other words, you become triple-threat when you catch the ball *ready to shoot*. It makes no difference whether the defense is man or zone. It is the immediate threat of the jump shot that triggers the full array of attack options. In the milliseconds during which he brings the ball into a shooting position, the receiver sees the options to drive, pass, or take the shot. This is what Joe Scott means when he says, "Good basketball players can dribble, pass, and shoot all at once."

Here's a clip of Michigan State's Aaron Henry, torching the LSU defense in 2018-19 NCAA tourney with a shot fake, drive, and pull-up jumper.



**Catching the ball "ready to shoot" makes the game binary.** It forces the defender to concede an open jumper or rush the shooter, leaving him vulnerable to a shot fake and penetrating drive. And once the drive begins another set of binary options emerge.

Watch the Aaron Henry clip again. As he drives the lane he forces two help side defenders to leave their own men to block his path to the basket.





Henry reads their reaction, stops on a dime and pulls-up for a short jumper... but the option to pass the ball is there as well.



Each step of the way, the defense is confronted with an "either/or choice that in turn, leads to an "if/then" response from Henry. His reads are quick, intuitive, and decisive, the defense left with little or no reaction time to recover.

#### **Building Blocks**

Let's examine some additional examples of the binary principle at work.

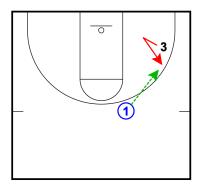
Each depicts a cutting action characterized by a sudden change in direction or speed or combination of the two that influences or moves the defense in one direction, freeing the offense to move in the opposite direction. All are shaped by three axioms or rules:

• Read the defender, not the ball. Your focal point is *bis position* in relation to you, the basket, and the ball.

• You are most free when you are closely guarded. Close the distance between you and your defender to shorten his reaction time. If he is playing you high and tight, take him higher. If he is playing you low and loose, take him lower.

• At the decisive moment, change direction.

First, the **V-Cut**, most easily demonstrated when a forward or wing seeks to free himself to receive an entry pass to initiate an offensive possession or to facilitate ball movement as the possession unfolds. Consider the following:



To achieve separation and receive the pass, #3 must break his defender's cushion. So, he cuts sharply toward the basket, forcing his defender to block his path to the rim. Then, with a sudden change in pace and direction, he V-cuts or reverses back to his original position on the perimeter to receive the guard's entry pass.

By first cutting or jabbing *toward* the basket, he forces his opponent to make a choice: prevent a possible layup or concede it. Unless he is significantly quicker, the defender can't simultaneously deny the basket cut and the entry pass to perimeter. He must concede one or the other because he doesn't have enough reaction time to contest both.

The sudden reversal represented by the V-cut is a jujitsu-like move that uses the defender's momentum against him. The threatening move toward the rim must be convincing. Very often it takes the form of an aggressive jab step but may require the beginning steps of an actual cut. If the defender moves, shifting his weight in the direction of the jab or cut, the cutter reverses direction. If he doesn't, the cutter continues his path to the basket or starts the process all over again.

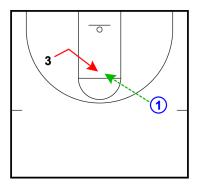
This can also be accomplished by a more casual move toward the basket – literally walking the defender toward the lane or basket, then breaking sharply and much more quickly in the opposite direction.

In either case, the initial steps of the V-cut must be "authentic." The defender must be convinced that the forward is threatening the basket... that he is breaking free on a path to the rim to catch a penetrating pass from his teammate.

Here's another illustration of the same principle at work.

In this case, our forward is stationed on the help side of the defense. His defender has likely sagged toward the ball and dropped closer to the basket, taking up a position where he can see both his man and the ball. #3 may be quick enough to flash in front of the defender to receive the intended pass but more often than not the defender's helping position will give him enough reaction time to step into the passing lane and deny the pass. Consequently, to get free, #3 must destroy his defender's cushion. To do so, he first closes the

distance between them by moving *toward* the defender, then executes the v-cut back toward the intended line of the pass.



Using the V-cut to free oneself to get open naturally sets up the "Back Cut." In fact, as suggested above, the two moves complement one another. They're really the same cut working in opposite directions, one triggering the other based on the defender's initial response.

Implicit in the next illustration is a defender playing "on the line, up the line," positioned to deny any pass to the forward. So, #3 challenges the defender by first moving him higher and tighter, then quickly reversing to the basket.

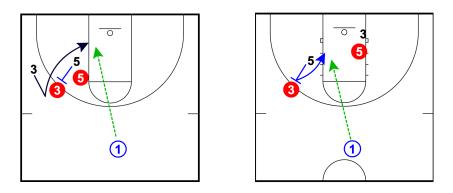


V-cuts and Back cuts can be used in tandem to create separation. The critical factor is breaking the defender's cushion at the moment the ball handler is ready to deliver the ball. Note the axiom described above: *If he is playing you high and tight, take him higher. If he is playing you low and loose, take him lower.* In general terms this is correct but regardless of where he is positioned – high or low – *any cut that threatens the basket or moves the defender in the direction of the ball* will usually force him to tighten, shrinking his cushion and reaction time. When this occurs, a binary, either/or choice emerges and the offense gains the upper hand.

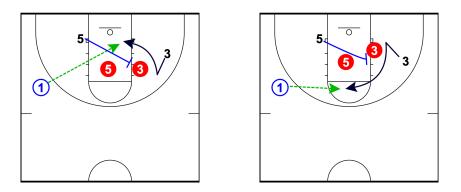
V-cuts and Back cuts can also be used in combination with various screening actions to create difficult binary choices for the defense. In the diagrams that follow I've added defensive players to the mix to better illustrate how screening and cutting work in tandem to penalize defenders in the midst of an either/or situation.

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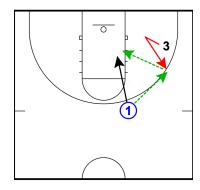
We see two defenders in denial position with the ball at the point. The offensive forward, #3, takes his man higher creating an avenue for this teammate, #5, to set a back screen. Then, he reverses to the basket, scrapping his defender off the screen. Unless the two defenders switch, #3 has a free path to the basket. And if they switch? The screener rolls to basket with his defender – the man he screened -- on his back.



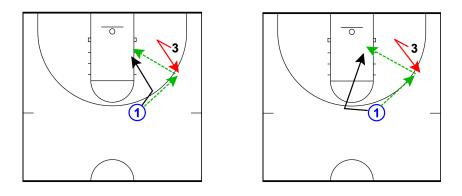
Here are two more illustrations, this time featuring screening action on the help side of the defense. In one case, we see a back cut off a cross screen; in the other, a wide curl set up by a V-cut and supporting cross screen.



Next, let's examine the most elemental and crowd-pleasing cut in basketball, the Go Cut. In its simplest form, the ball handler passes to a teammate and sprints past his defender looking for an immediate return pass on his way to the basket. There's little guile involved – at most a sudden change of pace as he closes with the defender, followed by a foot race to the rim. And since the defender begins the race with his back to the basket, he's already at a disadvantage.

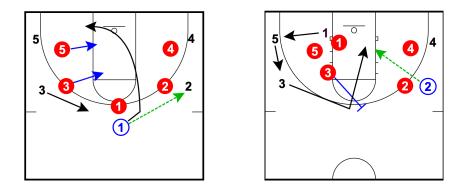


The Go cut is often paired with a V-cut and change of pace. For example, after passing the ball, the cutter may begin the maneuver by moving *toward* the receiver, then breaking sharply down the lane to the basket. Likewise, he may reverse this pattern by cutting *away* from the receiver before he executes the Go cut.



However, this is an inherently weaker option than a Go cut aimed directly to the basket or initially toward the ball because it grants an experienced defender too much reaction time. Recall Bobby Knight's popular "passing game" offense popularized in the 1970s: a freelance, read and react attack based on a few simple rules, one of which was "pass and screen away." After a while, defenses adjusted. Teams like Denny Crum's Louisville Cardinals stop chasing cutters "screening away" and, instead, simply switched. The lesson is clear: if you intend to set up the give-and-go with a v-cut, the more effective approach is to begin the cut toward the ball, then veer sharply toward the basket. Force the defender to come closer to you, then when his cushion has shrunk and he has less reaction time, reverse direction.

This is more dramatically demonstrated by reflecting on the following 5-on-5 scenario. The point man, #1, passes to the wing, #2, and makes an immediate Go cut toward the basket. As he vacates his position, #3, his teammate on the opposite wing, cuts to replace him, but #3's defender rushes from his help position to invade the intended passing lane and deny the pass. In response, #3 reverses direction and launches his own Go cut down the lane to the basket *behind the defender*.



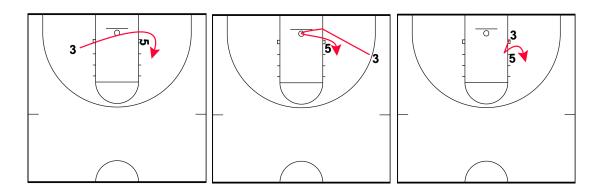
Successful Go cuts usually involve some form of overplay by the defender – either because he is aligned in an aggressive, denial position or because he moves quickly into such a position to counter his man's movement and his forward momentum places him in jeopardy.

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The Curl Cut and its family related actions is one of basketball's most effective maneuvers and vividly illustrates the concept of binary playmaking.

Each iteration features an off-ball screen set along or near the lane line for a cutter exiting the lane. Sometimes the screener assumes a "pin screen" position with his back to the near sideline, his hips aligned to the lane line. At other times he may stand stationary on or above the block, *facing the baseline*, his back to the ball, or arrive in this position by executing a "down screen." And finally, he may assume a stationary position on or above the block, *facing the free throw line extended*, where he can see the ball, with the cutter "stacked" or roaming somewhere behind him.

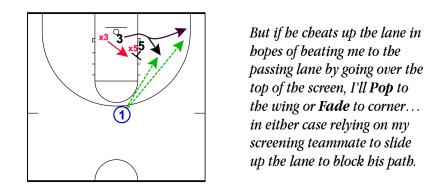
Regardless of how the screener assumes his screening position, the decision-making is wholly in the hands of the cutter who runs or *scrapes* his defender *off* the screener. The screener serves largely as a "passive obstacle in the roadway" used by the cutter to shed his defender and get free.



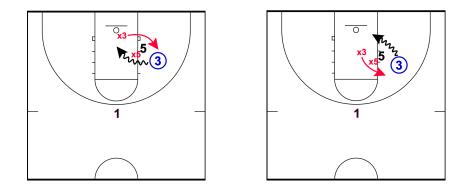
There are three basic cuts in the Curl family, each placing a premium on moving without the ball and reading the defender as you go. In each case, as the cutter takes his defender closer to the screener, he forces him to choose a path – the proverbial fork in the road – then takes the other path. The cutter's thinking process goes something like this:



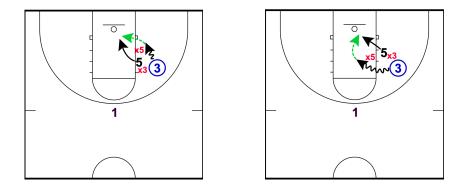
If he closely trails me as I begin my cut, I'll **curl** around the screen, scrapping him off my teammate in the process and ending up on direct path to the basket.



This, of course, generates a second binary choice, for any time the initial curling action frees the cutter to catch the ball at the wing "ready to shoot," his defender is vulnerable to a "shot fake and drive" or an immediate "catch and drive." If he's late on the trail and rushes to the wing on the catch, the cutter will drive over the top and penetrate the lane. If instead of trailing the cutter, he cheats over the top, then rushes to the wing on the catch, the cutter will drive baseline. No matter which path he takes – under the screen or over – he leaves the other path to the basket wide open.



The defense's only alternative is to switch assignments in hopes of blocking the drive, but if they do, the screener (#5) rolls to the basket unimpeded.



So far, each of the cutting actions we've explored feature players moving without the ball, forcing defenders into straightforward binary, "either/or" choices where they have limited reaction time, then countering with a rapid change in direction or speed or both.

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#### Let's move now to a more complex maneuver, the classic Pick-and-Roll.

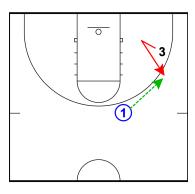
While our previous examples involve "off the ball" action, the Pick-and-Roll is an "on ball" maneuver requiring advanced ball handling and footwork skills, and basketball maturity honed through experience. Consequently, while the maneuver seeks to trap the defense into a binary choice that rewards the offense, the pick and roll often takes more time to unfold than "off ball" actions, leaving room for defensive decisions that are more nuanced and harder to read.

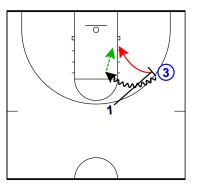
Does the on-ball defender intend to go under the pick or over it? Will be and bis teammate switch assignments as the picking action unfolds or will they aggressively trap the ball bandler? Will they employ an "icing" tactic, pushing the ball bandler toward the baseline with the off-ball defender zoning the gap? Does their choice of tactic depend on particular matchups, the position of the ball, the game situation, or a combination of factors?

Interpreting these defensive choices is challenging. Nonetheless, the pick-and-roll is an offensive maneuver that attempts to place defenders into "no-win" situations where a choice to respond in one way renders them vulnerable in another way.

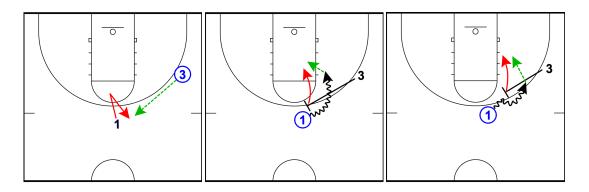
Here are three examples of the pick-and-roll maneuver:

The **Inside** pick-and-roll generally begins with an entry pass from a guard to a forward. The forward fakes a baseline drive giving the guard time to set an Inside pick. The forward then moves off the pick for a jumper, dribble drive, or drops the ball to the screener rolling underneath.

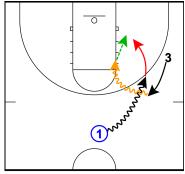




The **Outside** pick-and-roll mirrors the Inside maneuver but works in reverse. It begins with a pass from the forward to the guard followed by the pick-and-roll, or is initiated by the guard dribbling toward the forward and moving his defender into the forward's pick.



The **Corkscrew** is similar to the Outside but the pick is actually set by the ball handler. The guard dribbles toward the forward and with a reverse pivot hands the ball to him for a jumper or drive, then rolls to the basket.



#### The Missing Ingredients

The binary maneuvers we've explored are not exhaustive but provide a taste of *either/or* decision-making and how such actions contribute to simple but effective offense. So far, we focused on just a few players operating together in two-on-two or three-on-three situations. What happens when we add more players to the mix?

How do we prevent the addition of more players to the equation from complicating the reads, granting the defense precious time to react?

The answer lies in using specific **alignments and movements** that spread or gap the defense, creating greater operating space for the offense and weakening the effectiveness of helpside support by isolating the defenders from one another.

Offensive alignment and movement work in concert guided by three principles:

- Alignment coupled with high-velocity passing is more important than movement. Constant movement destroys more opportunities than it creates.
- When the offensive formation is balanced and the ball is centered at point, the defense freezes.
- When the ball penetrates the lane, the defense collapses.

Keep It Binary, Stupid Basketball's Fourth Law Let's begin with an extremely simple but dramatic illustration of these principles at work – a brief seven second clip of Kentucky's game with Auburn game back in 2014-15.



Could basketball be any simpler? Watch the video again but before you do, **let's unpack the maneuver frame by frame.** 

As the ball crosses half court Kentucky begins to shape its offensive alignment with a bit of faux action – just enough movement to keep the Auburn's perimeter defenders busy. The left wing, #2 cuts over to top of the high post, #15, to the opposite wing.



Then #15 steps out to the top of the circle to screen for #5, freeing him to bring the ball to the vacated left wing. Kentucky's two remaining players come into view, stacked or in tandem along the lane line. They're essentially stationary and so, too, are their defenders.



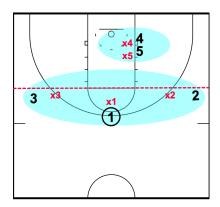
As #5 reaches position on the left wing, the faux action comes to a halt and the actual intended maneuver begins to unfold. #5 reverses the ball to #15, now stationed at the point.



Note what's happened. With very little movement and a single pass to center the ball at the point, the alignment is set, balanced across the top and along the lane line, the defense frozen in place.

The offensive players are effectively aligned on two distinct planes, each isolated from the other. Every defender is focused on guarding his own man. The defenders above the free throw line extended can't help those on the interior or vice versa. There's no help side and very little reaction time left for the defenders.

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As #41 begins his curl cut, the interior defense is at extreme risk. The close proximity of the stacked attackers to the basket leaves the defenders with no room for error. A decision to react in one way leaves them vulnerable in another way. In fact, the bottom defender trailing the curling cut is so desperate to prevent the penetrating pass, he trips and falls to the floor, leading to an easy score.







The lesson here is that very little movement and passing is actually needed to isolate the defenders from one another and center the ball, leading to quick, either/or decisions thrusts at the basket.

Here's another series of clips of this same maneuver. Watch in particular how Kentucky varies its faux movement on the perimeter to center the ball, followed by the interior attackers challenging their defenders with a variety of quick binary actions – a curl, a slip, a short jumper.



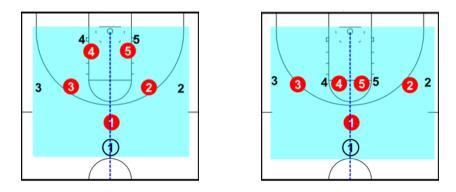
It's not just the *shape* of the alignment that stresses the defense **but how specific personnel are assigned to specific positions** *within* **the alignment.** One of Kentucky's guards could have brought the ball directly to the point to make a single penetrating pass to the interior, but the faux movement allowed them to transfer the ball to a "big" at the point while they took up wider positions on the wings of the alignment where their quickness in open space would further stretch and isolate the defense. The big's height combined with the fact that he is "live" – able to pass, shoot, or maneuver with a dribble, if needed – aids his penetrating pass to the interior of the formation.

Depending on the personnel in the game at the time and the specific match-ups, all kinds of possibilities are inherent in Kentucky's set. For example, three interchangeable small men aligned on the perimeter with two bigs in the stack, or a big and a small aligned on the inside forcing smaller man's defender to play him in the post, or any other combination based on the size, quickness, and the particular skills of each offensive player.

So, alignment – the offensive formation as well as the placement of personnel within it – trumps movement. Furthermore, as we explored in <u>Basketball's Third Law: The Basket is True North</u>, an odd front with the ball at point is stronger than an even front with the ball at the side.

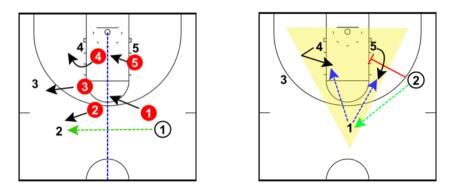
The defense is most vulnerable when the ball is at the point because, *in that moment*, there is no distinction between ball side and help side. With the ball in the center of the floor, the defenders are forced to guard a

wider area of the floor. And if the offensive alignment is *balanced* – each side of the formation mirroring the other as depicted in the illustrations below – the defenders are not only forced to guard a wider area but to give *equal attention* to each attacker.



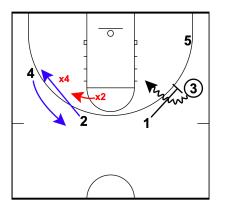
To be sure, they will be wary of particular players, those who physical prowess and talent demand it, but all things being equal, when the ball is centered and the offensive formation balanced, the defense is most vulnerable.

This is why defenders in a contemporary man-to-man defense will attempt to *push* the ball off the point to one side of the court or the other, and will work very hard to prevent a return pass to the point. When facing a two-guard front, they may permit a lateral pass from one guard to the other because the ball remains on the perimeter and the defense merely slides with the movement of the ball. But against a one-guard front, if the ball is returned to the point, the distinction between ball side and help side momentarily disappears, and the defense is exposed to a quick, penetrating *second* pass into the heart of the defense with little or no time to react.



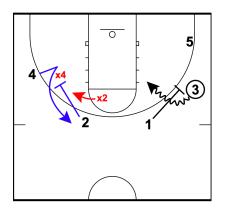
Does that mean an even or a two-guard offensive front is always a liability?

Of course not, but the offensive scheme must account for and occupy the help side defenders to prevent them from congesting the ball side and supporting their on-ball teammates who are at risk because of shortened reaction time. This is generally done in one or a combination of ways: exchanging positions, screening, reversing the ball, or using movement to morph into an odd or one-guard front.



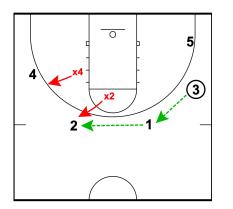
#### **Exchanging Positions**

In this illustration, the offside guard and forward simply swap positions to move defender x2 out of his help position in the center of the floor, creating more room for the ball side attackers to maneuver. Even if he and his teammate, x4, switch, they will momentarily be occupied or distracted by the exchange movement.



#### Screening

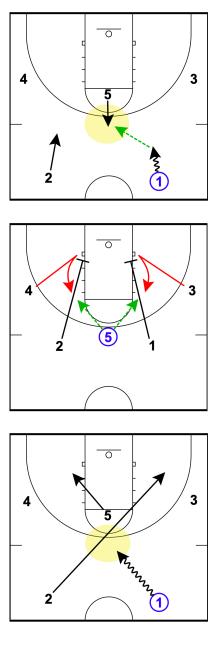
A more aggressive tactic, it requires greater finesse and timing than merely exchanging floor positions. In this illustration defender x2 is forced to choose between providing help on the dribble drive or supporting x4 on screening action.

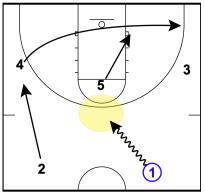


#### **Reversing the Ball**

Passing the ball quickly from side to side, hoping to catch the defenders flatfooted as they react to the flight of the ball, is a time-honored tactic to occupy help side defenders. One second a defender finds himself on the ball side, the next on the help side, his responsibilities shifting with each pass.

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# Morphing

The most effective two-man fronts are those that **morph** or transition into one-man fronts.

In the first two illustrations, the center "pulls out" to the top of the key to receive an entry pass.

In this position he now occupies the point, the tactical "high ground" of the offense. The defense is temporarily frozen in place as there is no ball side or help side. His teammates can execute any number of maneuvers to free themselves for a shot. Recall the Kentucky clips we explored earlier in this essay.

The same result can be accomplished by moving the off guard "out of the way," freeing the ball handler to drag the ball to the point where he can direct the offense.

In the third diagram, #2 splits the top defenders by cutting diagonally to the corner, creating space for the ball handler to "point the ball."

In the fourth, he fills the space vacated by #4, "pulling" #1 behind him as he cuts.

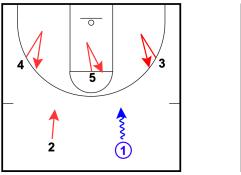
#### Putting the Pieces Together

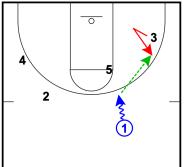
Let's recap what we've learned by examining two offensive schemes in greater detail – one very traditional, the other contemporary.

#### • The UCLA Offense

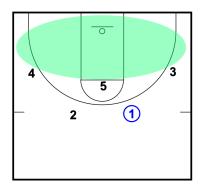
John Wooden used his patented 2-1-2 high post offense to win seven of his ten national championships. The offense is so closely associated with him that it is frequently called the "UCLA offense" and features the often copied "UCLA cut."

As the ball crosses half court and advances toward the top of the key, the high post center and forwards aligned across the free throw line extended, begin moving their defenders toward the baseline. At the right moment, they use v-cuts to break sharply back to the perimeter to set-up the guard's entry pass.

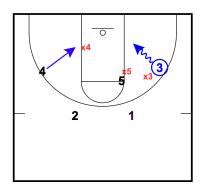




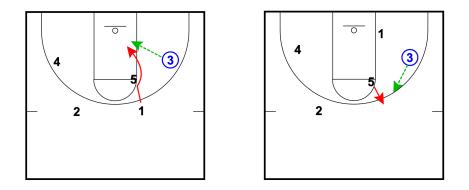
Note the large amount of open space between the free throw line extended and the basket, over one-third of the front court. From a defensive perspective, the most perilous location on the floor, the entire backside of the defense exposed.



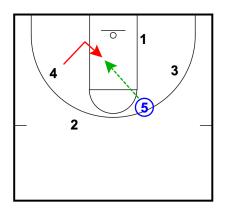
Any overplay to deny the entry pass leaves the defense vulnerable to a quick "catch and drive." While defender x4 is in position to help, he's stuck in a no-win, two-on-one situation. If he aggressively closes on the driver, he leaves own man open, flying to the rim for a layup or dunk.



If the forward holds his position, unable to drive or shoot, the offense proceeds with Wooden's famous "UCLA cut" – a "go" cut facilitated by the high post's screen. Wooden wanted to threaten the defense with an immediate penetrating cut, simultaneously placing the high post in a position where he could easily "pull out" to become the second option if the give-and go-failed.



From this position the center has effectively become the point, the two-guard attack morphing into a oneguard front. In quick succession, the offense unfolds with three binary actions: a flashing cut from the offside, a down screen to a curl or pop, a reversal and two-man play. At every step in the progression, the offensive players read the defense and freelance.

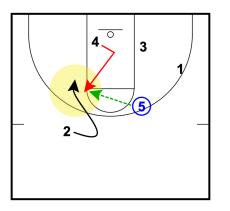


# The Offside Flash

As soon as he receives the pass from the forward, #5 whirls and looks down and across the lane to the offside forward, #4, who cuts directly at the rim, then v-cuts and flashes to the ball.

#### The Onside Down Screen

As #4 executes his flash cut, the onside forward, #3, feints toward the ball, then breaks sharply to the lane to set a screen for #1, the guard who had originally run the penetrating go cut. #1 reads his defender, curling to the basket or pulling to the perimeter for a quick jumper.



2

#### The Two-Man Play

If the first two options are denied, the center looks back to #4 who is flashing up the lane to receive #5's pass. From there, #4 and 2 play a two-man game

Beyond these basic maneuvers, the attack features dozens of options within options, each predicated on the players' read and react decisions. When diagramed and explained *on paper*, the offense looks highly scripted, but *in practice* unfolds in a very flexible, fast-paced, and freelance manner.

Here are some clips of the UCLA offense in action during the 1970-71 season:



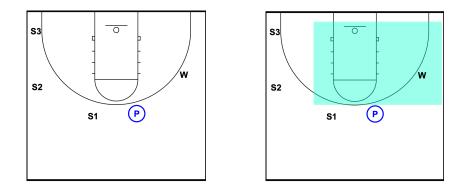
#### • The Wing Ball Screen

Wooden's offense was conceived and widely copied in the era before the 3-point shot was introduced. In response to the shot's growing popularity and the findings of modern analytics, many coaches jettisoned traditional offensive sets that concentrated players near the post in favor of attacks that *spread the floor*, fostering two extremes: dribble drives to the rim in search of high percentage 2-pointers (or a trip to the charity stipe) and 3-point attempts where the lower shooting percentage was more than compensated by the opportunity to pick up an extra point.

The two actions complement one another. Spreading the floor by stationing shooters outside the arc creates room for a driver to attack the rim and, if denied by a help side defender, an open passing lane to a teammate on perimeter for a 3-point attempt.

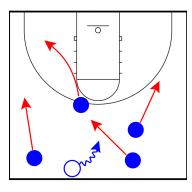
There are many variations to the modern spread offense concept. One of the more popular is the *Wing Ball Screen*. Here's how it works.

First, **the basic alignment**. In this illustration, three shooters are stationed on one side of the floor, beyond the 3-point arc, leaving a huge portion of the front court exposed for two-man, freelance basketball.



In its ideal form this offense is *positionless* – that is, any player on the floor can fill any of the positions because each man is capable of playing the role required of any of the floor positions – screening, ball handling, driving, shooting the three. More likely, though, their talents and skills are not shared equally: some are better suited for specific roles than others. The point (P) and the wing (W) are the team's quickest and most skilled ball handlers, adept at two-man basketball. The three shooters (S1, S2, S3) are good jump shooters with sufficient range to concern their defenders; perhaps at least one of them serves as a swing man or third guard who can interchange with the point and the wing as the situation demands.

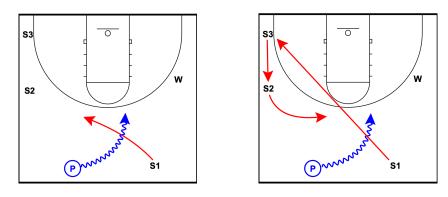
Second, **filling the spots**. There are a variety of ways they can fill the formation as they arrive in the front court. For instance, if the team is truly positionless, they may fill the spots on a "first come, first served" basis, especially if they intend to flow into the set immediately after a stalled fast break. *"If you're the first one near or on a spot, take it."* 



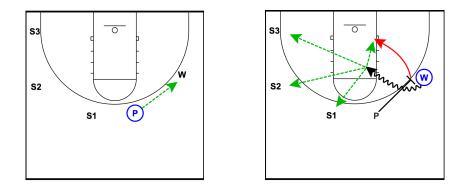
If, the roles are pre-determined based on the skills and suitability of each player for a specific position, then the flow into the formation will be a bit more scripted. The coaching staff may establish "rules" or easy-to-read cues to route the players to spots on the floor. For example, the base alignment requires an "empty corner" to provide maximum space for the wing ball screen to unfold. If, during transition, one of the shooters has already filled a particular corner, the other shooters know to fill the remaining spots *on that side of the floor*. On the other hand, the staff may pre-determine the "empty corner," dictating where they want the two-man action to occur. Before the game, during a timeout, or as the ball advances up the floor, they may use simple

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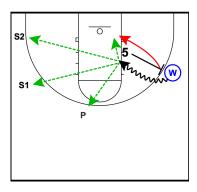
code words to quickly communicate the shape of the preferred alignment – "Rip" and "Liz," "Pro" and "Con," and the like. The players respond accordingly. The key is to set the alignment and spread the defense.



Once the players are in place, **the two-man maneuver unfolds**. In the illustrations below, the point passes the ball to the wing and sets an inside screen. The wing drives off the screen to penetrate the lane and if denied, pitches the ball to the perimeter for a 3-point shot or hits the screener as he rolls to the basket



This can also take place in a "4-out" alignment featuring a post player stepping out to set the screen for the wing player.



Despite the offense's name, **the attack is not limited to the** *wing ball screen*. On the "open" side of the floor, the point and wing players can execute a wide variety of binary, freelance actions based on how they read of the defense: catch and shoot, catch and drive, give-and-go, back cut, outside pick-and-roll, corkscrew,

Keep It Binary, Stupid Basketball's Fourth Law and the like. In the same manner, on the "closed" side of the floor, the three "shooters" can remain stationary, exchange positions or move in other ways to occupy their defenders.

The wide spread of the alignment and the basic screening action merely set the table; the offense is fundamentally read-and-react basketball using the threat of the three-pointer to stretch the defense and penalize help side support.

# **Conclusion**

Basketball unfolds as a series of choices, one leading to the next. No matter how controlled or patterned a team attempts to be, the offensive scheme will inevitably break down requiring the attackers to improvise.

Effective coaching exploits this reality by placing players in spots where their natural freelance abilities come to the fore and where the choices are *binary* - "either/or" situations where it is relatively easy for the offense to read the defense and act quickly.

Complicated offensive schemes that congest the floor, obscure the choices, and attempt to control too many variables reward the defense by creating uncertainty and indecisiveness. Too many moving parts complicate the reads, granting the defense time to react.

Conversely, offenses that create quick, binary decision-making are built around actions and maneuvers that shorten defensive reaction time. Effective offense reduces the number of choices by forcing defenders into "no-win" situations where a choice to respond in one way renders them vulnerable in another way. This makes it easier for offensive players to see or read the defense and seize the initiative quickly.